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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,383	02/15/2002	Paul V. Haydock	018048-001710US	3693
20350	7590	01/10/2005	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			TUNG, JOYCE	
			ART UNIT	PAPER NUMBER
			1637	

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/077,383	HAYDOCK ET AL.	
	Examiner	Art Unit	
	Joyce Tung	1637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 and 37-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-36 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/8 and 12/10/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The applicant's response filed October 21, 2004 to the Office action has been entered.

Claims 1-44 are pending.

Election/Restrictions

1. Applicant's election with traverse of Group II claims 7-36 in the reply filed on October 21 2004 is acknowledged. The traversal is on the ground(s) that the two groups set forth by the Examiner all stem from a common concept and theory and are related and so there is no burden on Examiner. This is not found persuasive because as set forth in the Office action mailed September 17, 2004, Group I, claims 1-6 and 37-44 are drawn to an oligonucleotide primer which can be used in a nucleic acid array or amplifying a single nucleic acid target, whereas Group II, claims 7-36 are drawn to a method of amplifying a target nucleic acid via transcribing multiple amplification duplexes. Thus the examination of two groups together causes a burden on the examiner.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-6 and 37-44 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Group I, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on October 21, 2004.

Claim Objections

3. Claim 20 is objected to because of the following informalities: the phrase "to amplified" might be typographic error. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 7-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claims 7-36 are vague and indefinite because of the phrase “extending said second primer-antisense transcription product complex” in claim 7. It appears that in step v.) of claim 7 said first primer is hybridized to said an antisense transcription product to form a first primer-antisense transcription product complex. Thus, there is no antecedent basis for “extending said second primer-antisense transcription product complex”.

Clarification is required.

Allowable Subject Matter

6. Claims 7-36 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter:

Concerning claims 7-36, no prior art has been found teaching or suggesting the method of amplifying a target nucleic acid in an aqueous solution via transcribing an intermediate duplex with the reverse transcriptase that lacks RNaseH activity in that the first strand of the intermediate duplexes comprises in the following order from 5' to 3': a phage-encoded RNA polymerase recognition sequence, a first spacer sequence comprising a sequence of from 12 to 20 nucleotides that consists of one nucleotide type or two different nucleotide types and a first

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target complementary sequence which can bind to a segment of the target nucleic acid and the second strand of the intermediate duplexes comprises in the following order from 5' to 3': a second target complementary sequence which can bind to a segment of the target nucleic acid, a second spacer sequence comprising a sequence of from 12 to 20 nucleotides that consists of one nucleotide type or two different nucleotide types and a phage-encoded RNA polymerase recognition sequence.

The closest prior art is the reference of Haydock et al. (WO 00/73486, issued December 7, 2000). Haydock et al. disclose a method for amplifying any nucleic acid sequence involving transcribing an intermediate duplex, which has the similar steps with the claimed invention. However, the intermediate duplex used in the instant invention does not have the same structure as the structure of the intermediate duplexes used in the method of Haydock et al..

Summary

7. No claims are allowable.
8. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Joyce Tung whose telephone number is (703) 305-7112. The examiner can normally be reached on Monday-Friday from 8:00 AM-4:30 PM.

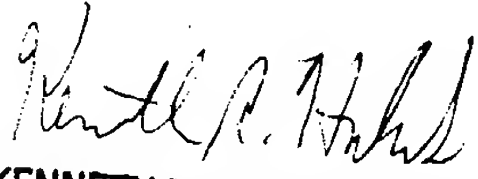
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached at (703) 308-1119 on Monday-Friday from 10:00 AM-6:00 PM.

Any inquiries of a general nature or relating to the status of this application should be directed to the Chemical/Matrix receptionist whose telephone number is (703) 308-0196.

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9. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Art Unit 1637 via the PTO Fax Center located in Crystal Mall 1 using (703) 305-3014 or 308-4242. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Joyce Tung
January 6, 2005


KENNETH R. HORLICK, PH.D
PRIMARY EXAMINER

1/6/05